

ABSTRACT

The invention provides a data processor realizing high-speed reading of an on-chip nonvolatile memory and improvement in defect repairing efficiency. For a nonvolatile memory, nonvolatile memory cells each having a split-gate structure including a memory transistor part of an ONO structure and a selection transistor part for selecting the memory transistor part are employed. The gate withstand voltage of the selection transistor part can be lower than that of the memory transistor part, so that it is convenient to increase reading speed. A specific storage region which can be read by a resetting instruction of the data processor is assigned to a storage region in the nonvolatile memory, and repair information and the like is stored in the specific storage region. An internal circuit to which the repair information is transferred replaces a normal storage region instructed by the repair information with a redundant storage region. Thus, a program for an electric fuse and a laser fuse is not required to designate an object to be repaired.